

381 D. *Oedogonium vesicatum* Link var. *dissimile* (Tiff.) Almeida, comb. nov. = *O. decipiens* Wittr. var. *dissimile* (Hirn) Tiff. N. Amer. Flora II: 68, pl. 24, f. 384, 385, 1937.

12. *Oedogonium vesicatum* (Lyngb.) Wittr. (1874) is the later homonym of *O. vesicatum* Link (1856).

Although *Conferva vesicatum* Lyngb. (1819) had priority, the specific epithet *vesicatum* was pre-occupied in the genus *Oedogonium* and the name proposed by Wittr. becomes an illegitimate name.

Therefore the following new name is proposed:

485. *Oedogonium marselinae* Almeida, nom. nov. = *O. vesicatum* (Lyng) Wittr., Nova Acta Soc. Sci. Upsal 9:39, 1874 (non, 1873). = *Conferva vesicata* Lyng Tent. hydrophyth. danicae. Hafniae 140, pl. 47, f. D1, 1819.

This specific epithet proposed here is in honour of Marselin (Mr. M.R. Almeida) for his

contribution to Indian Botany.

13. *Bulbochaete variens* Wittr. var. *major* (Pringsh.) Almeida, comb. nov.

= *Bulbochaete pygmaea* var. *major* Pringsh. Jb. Wiss. Bot. 1:74, pl. 6, f. 11, 1858.

= *B. variens* Wittr. var. *subsimplex* (Wittr.) Hirn. (1900).

Although *B. subsimplex* Wittr. (1870) is the prior name, under the rank of species, the varietal epithet *major* has priority.

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REFERENCES

GONZALVES, ELLA A. (1981) Oedogoniales — Indian council of Agricultural Research New Delhi, pp 144-579.

PRESCOTT, G.W. (1951a): Algae of the Western Great Lakes

Area, Cranbrook, Inst. Sci. Bull. 31:946 WM. C. Brown Co. Inc. Iowa 2nd Ed. 1962.

GREUTER, W. (1994) International Code of Botanical Nomenclature (Tokyo code), Germany.

38. WILD SPECIES OF *ABELMOSCHUS* MEDIC. (MALVACEAE) FROM CENTRAL HIMALAYAN REGIONS OF INDIA

Abelmoschus Medic. (Malvaceae) has 15 species which have originated and are cultivated all over the tropics in Asia and Australia (Hooker 1874, Babu 1977, Santapau and Henry 1984). In India, only 8 species are available throughout the hotter parts (Anonymous 1985, 1991). After the most thorough study to date, Waalkes (1966) stated that the 14-15 species recognized earlier can be reduced to 6-7 species only. The National Bureau of Plant Genetic Resources (NBPGR) in

its National Programme of crop-specific study on okra germplasm exploration in the eight hill districts of U.P., India from 1985 to 1992, procured, collected and assembled three species of wild okra from the Central Himalayan region.

The material collected was compared with authentic collections preserved in Northern circle, Botanical Survey of India, Dehradun (DD), specimens were identified as *Abelmoschus*

ficulneus (L.) Wight & Arn. ex Wight, *A. manihot* ssp. *tetraphyllus* (Roxb. ex Hornem.) Borss. var. *pungens* (Roxb.) Hochr. and *A. moschatus* Medic. Through our evaluation programme during 1993 and 1994 at Regional Station-Bhowali, a comparative study of taxonomical characters, distribution, habitat, variability etc., of 3 wild species of okra is presented.

Uttar Pradesh Dist. Chamoli; BSD-57625, Basarkhet to Guigani, Dist. Almora; BSD-40180, Lachiwala, Dehradun.

Local uses: Tuberous roots are edible as fresh and green vegetable; sometimes stems and roots roasted; fibres used as twine and light cordage.

***Abelmoschus moschatus* Medic.**

Local name: Kasturi Bhindi

Hispid herb 170 cm tall. Leaf orbicular-elliptic, palmate, cordate at base, 15.0 x 26.4 cm. Calyx 8 in numbers. Fruits 6.1 cm long, oblong-lanceolate, thinly hispid. Seeds 70 in number. Flowers yellow with crimson centre.

Fl. & Fr.: October-February

Habitat and Distribution: Negi- 1473/ NIC-14154, Ranikhet, 1500 m, dist. Almora, 24.vi.1992; BSD-64615, Ghansali roadsides, 1200 m, Dist. Tehri.

General variability observed in wild okra, all the 3 species were short in length and of medium thickness, while the colour of fruits varied from green, purple to light purple. The height of plant ranged from tall to very tall types.

This report of their occurrence and distribution etc. forms an addition to the flora of Chamoli and Nainital, U.P. Himalaya (Gupta 1968, Naithani 1984) and to the other temperate Himalayan flora of India (Collett 1902, Duthie 1906, Polunin and Stainton 1984).

A brief note is provided here to facilitate further collection and easy identification. These

three species of wild relatives of okra have been grown, multiplied and maintained at NBPGR, Regional Station-Bhowali.

***Abelmoschus ficulneus* (L.)**

Wight & Arn. ex Wight

Local names: Kapasi, Jangli Bhindi, Ran-Bhindi.

Much branched, prickly herb 185 cm tall. Leaf rounded, cordate at base, upper leaves palmate, 15.0 x 23.4 cm. Calyx 5 in number. Fruits 3.6 cm long, tomentose, ovoid, viscid hairs when green. Seeds 31 in number. Flowers light yellow with pink centre.

Fl. & Fr.: October-January

Habitat and Distribution: Pant-233, Chanoda, roadsides, 1200 m, Dist. Almora, 20.x.1985; BSD-934, Bindal river bank, Dist. Dehradun; BSD-3337, Motherwala, Dist. Dehradun; BSD-1095, Song river bed, 600 m, Dist. Dehradun; BSD-34004, Rispina, Dehradun; BSD-52420, Chopta, Kumaon; BSD-57507, Dwarhat, 1500 m, Dist. Almora; BSD-78086, Dam site, Dhauliganga dam, Dist. Pithoragarh.

Local uses: Fresh, green, tender fruits cooked as vegetables.

Abelmoschus manihot* ssp. *tetraphyllus

(Roxb.) ex Hornem. Borss. var. *pungens* (Roxb.) Hochr.

Local names: Kapasi, Jangli Bhindi

Bristly herb 255 cm high. Leaf ovate, sub-orbicular, palmate, cordate at base, 24.0 x 41.7 cm. Calyx 4 in number. Fruits 5.2 cm long, oblong, pointed hispid. Seeds 59 in number. Flowers yellow with purple centre.

Fl. & Fr.: September-December.

Habitat and Distribution: Negi-882, Karanprayag, 1150 m, Dist. Chamoli, 1.x.1988 Tewari *et al.* 1667/NIC-14490, Near Kaliasaur

landslides, 500 m, Dist. Pauri; Negi, Dogaon, 800 m, Dist. Nainital, Oct. 1988 (sic.); BSD-53758.

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REFERENCES

- ANONYMOUS (1985): The Wealth of India. New Delhi.
ANONYMOUS (1991): Report of an International Workshop on okra genetic resources, 1990, IBPGR, Rome, pp. 2-3.
BABU, C.R. (1977): Herbaceous Flora of Dehradun. New Delhi, pp 81-83.
COLLETT, H. (1902): Flora Simlensis, London, pp 60-61.
DUTHIE, J.F. (1906): Catalogue of Plants of Kumaon and of the adjacent portions of the Garhwal and Tibet 1918. Based on the collections of Strachey and Winterbottom during the years 1846-1849 (Rep. Bishen Singh and Mahendra Pal Singh, 1974), Dehradun, pp 24.
GUPTA, R.K. (1968): Flora Nainitalensis. New Delhi, pp 38.
HOOKER, J.D. (1874): Flora of British India, London Vol. 1: 334-344.
NAITHANI, B.D. (1984): Flora of Chamoli, B.S.I., Howrah, pp 94-95.
POLUNIN, O. & A. STANTON (1984): Flowers of the Himalaya, New Delhi, pp 62.
SANTAPAU, H. & A.N. HENRY (1984): A Dictionary of the Flowering Plants in India, New Delhi.
WAALKES, B. (1966): *Abelmoschus. Blumea* 14: 89-105.

39. USE OF *LINDENBERGIA MURARIA* LEAVES AND *IMPATIENS BALSAMINA* FLOWERS AS A SUBSTITUTE FOR HENNA

Leaves of *Lawsonia inermis* Linn. yield a colouring matter called "henna" which is used by women in various ways. But, *Lawsonia inermis* is not easily available in the tribal belt of southern Rajasthan. The juice of the leaves of *Lindenbergia muraria* (Roxb. ex. D.Don) P. Bruehl (Family Scrophulariaceae) is used as a substitute for leaves of *L. inermis* by the *Bhils* of southern Rajasthan. Fresh leaves of the plant are ground into a paste and the juice is extracted. It is stored in cups made of leaves of *Butea monosperma*. The juice is applied to the palms and fingers to produce the henna stain. The plant

L. muraria is found on old walls, crevices of rocks near moist situations, and near drains at moist rocky edges. The local name is "Kormi Mehndi" or "Kali Mehndi". Similarly a paste of flowers of *Impatiens balsamina* L. (Family Balsminaceae) is used as a substitute for "henna". This plant is locally called "Timda" in southern Rajasthan.

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40. *AMARANTHUS PALMERI* WATS. A NEW RECORD FOR MAHARASHTRA

During plant collection trips in Dhule dist. (Maharashtra) the author gathered some

interesting Amaranthaceae in wastelands and along highways near Dhule city. After critical